Holding Cost Impact in the Housing Affordability Puzzle

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The Housing Affordability Agenda

The issue of housing affordability is multi-dimensional. Its importance continues to capture the attention of the wider population, with the issue remaining highly ranked across the broader political agenda. Although there is a considerable quantum of literature evolving in relation to welfare aspects, and various theories and concepts related to housing affordability, there has been limited work completed on the delivery side of the equation. This is of particular interest given the volatility of property markets, where the expectations of property developers, and property owners, do not always align very easily.

The Relevance of Holding Costs in the Housing Affordability Puzzle

Time is of the essence to land development. Since time is critical, it is apparent that if a project takes longer to come to realisation, for any reason, then the costs of that project will increase. In the case of a property development project, costs relating to that portion of time when a project is held up are generally regarded as "holding costs", involving computation of "carrying costs" of initial outlays that have yet to fully realise their ultimate yield. Sometimes considered a "hidden" cost, if demonstrated to represent a major determinate of value, then considered in the context of housing affordability its impact is pervasive.

Holding costs in property development are varied in both form and in their computation, however ultimately they always relate to those costs incurred during any or all of the various phases in the development pipeline – from instigation (strategic identification) to project completion (sale and / or construction completion). This period can typically range anywhere up to sixteen years and even beyond - dependent upon many factors, such as the length of time taken for regulatory assessment, land banking behaviour of key stakeholders, funding structure and availability, and many others. Accordingly, it is much more multifarious than simple calculation of the interest cost, or opportunity cost, of long term land holding.

Ultimately the real impact of holding costs is felt by those whom can least afford it – i.e. new home buyers whom obtain finance. This cohort can be relatively easily pushed into the realms of un-affordability and mortgage stress, because of their sensitivity to impacts on mortgage repayments.

Current research and preliminary results from data modelling

Research is now emerging which exposes the significance and extent to which even small shifts in the regulatory assessment period, and other factors, affect housing affordability. It suggests that the extent of its significance has not been hitherto completely demonstrated.

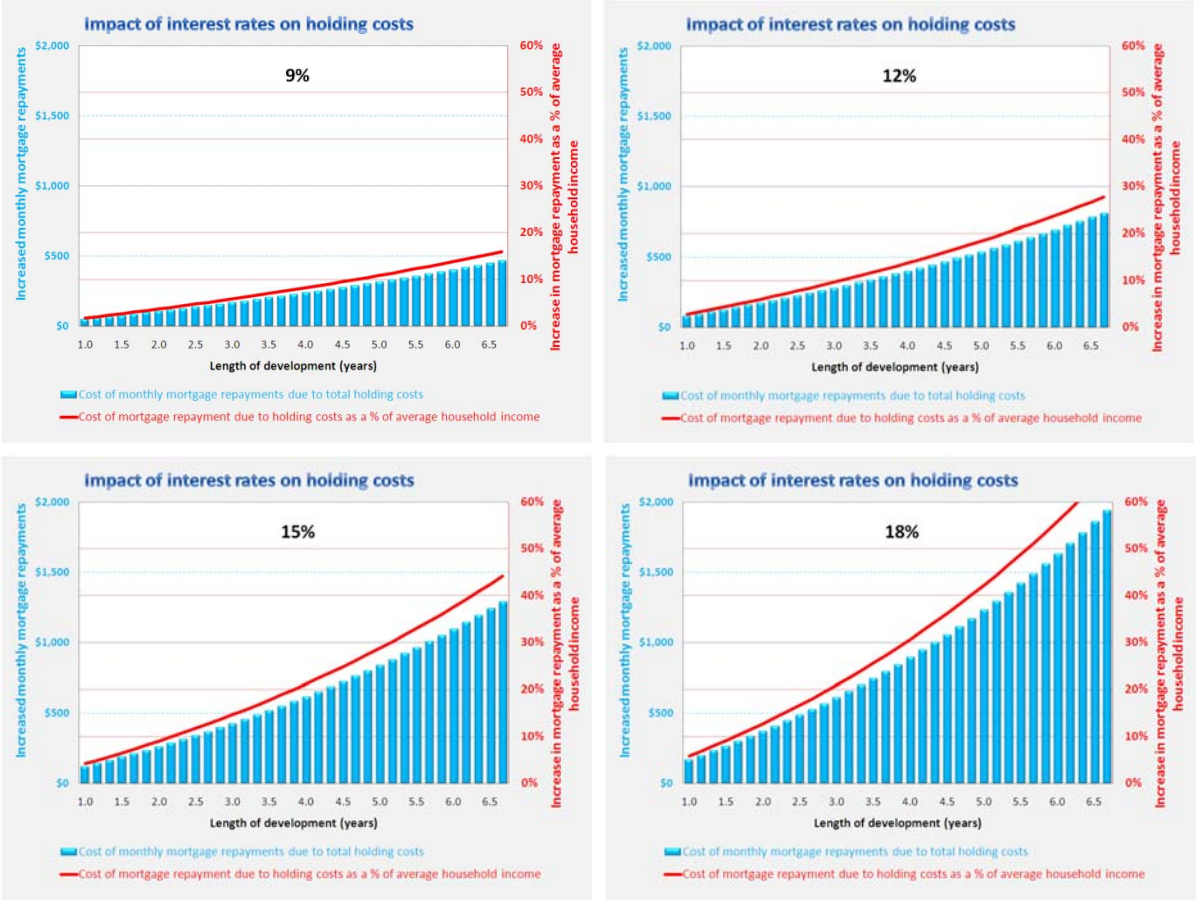
Preliminary results from the data modelling start with a base case scenario examining the effects of time for a typical mid-sized, say 200 lot greenfield housing land development project in south-east Queensland. It demonstrates the total holding costs for such a project under a prevailing interest rate environment of around 9% p.a. equates to approximately $15,000 per lot, assuming a 2.5 year total development time (which includes 18 months for the assessment of planning and building consents, including DA). If this time is reduced by 6 months, the holding costs will reduce to just over $11,600 per lot, and if time is increased by 6 months, the holding costs will increase to approximately $18,500 per lot. Put simply, for every month the development is delayed, the end-user (whom presumably will ultimately incur the holding costs) will pay extra about $500 more. However, this effect rapidly accelerates over time. For example, holding costs rise to over $26,000 per allotment where there is a four year development period, or just under $44,000 for a six year development period.

In order to assess the impact on housing affordability, these costs can be converted to additional mortgage repayment equivalent required to cover these additional costs. This amount can be further converted into a proportionate amount of average household income. In this way, calculated amounts can be applied against the "30/40 affordability rule" or other commonly used measures that identify impact against housing affordability. This is summarised in the following table which demonstrates the impact of lengthier assessment periods *accelerating* as time proceeds:

Total development time from acquisition (years)	**2**	**2.5** (base case)	**4**	**6**	**8**	**10**	**12**
Total Holding Costs	$11,689	$15,023	$26,149	$43,985	$65,935	$92,900	$125,977
Cost of mortgage repayment equivalent due to holding costs, per month	$107	$137	$239	$402	$602	$848	$1,150
Cost of mortgage repayment equivalent as a result of assessment period as a % of average household income	1.09%	1.67%	3.57%	6.51%	n/a	n/a	n/a
Cost of mortgage repayment as a result of all holding costs as a % of average household income	3.66%	4.70%	8.19%	13.77%	20.64%	29.08%	39.43%

n/a: indeterminate (may not be applicable) – length of holding period unlikely to be attributed primarily by delays in regulatory assessment in this instance.

The modelling also indicates significant sensitivity to the rate of interest and its impact over time – a logical outcome since it is interest rate (or inflation rate) equivalent that underpins the holding cost calculation. For example, our base case scenario is predicated on an average interest rate equivalent of 9% effective per annum. Based on a six year development period, should this rate increase to 12% p.a effective, then the holding cost charge rises from $402 per month monthly mortgage equivalent, to $693 per month which is slightly under 23.8% of household income. As with time increases, the interest effect accelerates as the rate increases, as shown in the diagrams below:



Whilst the modelling conducted to date has yet to be fully "field tested" it demonstrates the profound impact holding costs have upon housing affordability. Furthermore, the potential for mortgage stress increases not only when income levels are falling, but even when they are stable since the equation becomes unbalanced even in the event of small market rate "corrections".

The need for further research

The development of appropriate policy responses across housing, planning, taxation and other portfolios requires a deep appreciation of the range of factors shaping the supply of affordable housing. As housing affordability matters have both space and time variance, further research into holding cost impacts needs to be undertaken with a breaking down of the analysis, ideally by regions in Australia, over time. This could be considered alongside an international comparison study that confirms the extent and variability of regulatory assessment periods in Australia and elsewhere.

There is also a need to conduct case study investigations that sustain and extend the research. This would provide the means to field test the economic model, and prepare the way for the development of other econometric approaches which cross check the existing model. Further qualitative analysis will support the process, shedding further light as to the extent holding costs are passed on to home buyers.